

Pendergast, Jim

From: Frithsen, Jeff
Sent: Thursday, December 19, 2013 12:52 PM
To: Stoner, Nancy;Kopocis, Ken;Kadeli, Lek;Ganesan, Arvin
Cc: Olden, Kenneth;Walsh, Debra;Vandenberg, John;Alexander, Laurie;Fertik, Rachel
Subject: Preliminary summary of SAB review of connectivity report
Attachments: Overview of SAB Panel Preliminary Consensus.ConnectivityReport.final.docx

FYI.... Attached is our preliminary summary of preliminary consensus comments heard from the SAB Panel concerning the draft Connectivity Science Report. This summary reflects discussions in the final session of the meeting. These are all preliminary comments. We expect that panel summary comments will be posted on the SAB website in the next day or so.

Please let me know should you have any questions.

Big thanks to Laurie and Rachel for drafting late last night.

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Overview of SAB Panel Preliminary Consensus Recommendations and Comments Panel on the Report: *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence*.

The panel members complimented the authors on an impressive report. The consensus was that it is a comprehensive, thorough and technically accurate synthesis of a very large literature. They agreed that it could be strengthened in certain areas and needs editing to speak “with one voice” for better continuity and consistency. They proposed that a technical editor could resolve many comments related to consistency.

Major conclusions and findings

- All three major conclusions were recommended to be retained. The first two conclusions addressing 1) streams (tributaries) and 2) bidirectional/riparian/floodplain (adjacent) wetlands were strongly supported. There were comments and recommendations to strengthen these two conclusions and supporting text, but the conclusions were not questioned.
- The third conclusion regarding unidirectional (“other” waters) was in general supported, but with strong consensus recommendations for clarification. Some of the key recommendations from materials and panel discussions in the closing session are:
 - a. The panel unanimously agreed the following statement be stricken from conclusion 3:
“The literature we reviewed does not provide sufficient information to evaluate or generalize about the degree of connectivity (absolute or relative) or the downstream effects of wetlands in unidirectional landscape settings.”
 - b. The panel agreed that over sufficiently long timeframes “everything is connected,” but that not all degrees of connectivity or isolation affect downstream water integrity. They agreed that conclusion 3 should emphasize the report’s finding that these waters exist on spatial and temporal gradients of connectivity, and identify factors that determine where there is likely to be a downstream effect.
 - c. The panel could not identify any waters that were truly isolated. They did cite examples of hydrologically isolated waters, but agreed that when biological connections or longer time scales were considered, even those examples were connected. They therefore rejected a suggestion from two panel members that the report should identify which waters are “truly isolated.”
 - d. The panel agreed that spatial and temporal scales and gradients of connectivity need to be better articulated in the report. They also agreed that with an enhanced conceptual framework illustrating flowpaths and gradients of connectivity (see below), it could be possible to identify groupings of waters that generally have greater influence on downstream waters.

Consensus comments on entire Report

- The panel consensus was that the report should include separate sections on (1) the importance of aggregation for estimating downstream effects and (2) the dynamics of space and time-dependent changes to connectivity.
- They recommended that the role of biological connectivity be strengthened throughout the report.
- The panel also emphasized the need to expand the discussion of human alterations to system connectivity and dynamics as a way of better understanding impacts on downstream integrity.
- A consensus on the report as a whole was that the structure should better reflect the integrated behaviors of river systems. They recommended specific revisions to accomplish this, including: enlarge the current system diagram of hydrologic flowpaths (Figure 1-1) and supplement it with diagrams of other system flowpaths, including geologic, biological and chemical flows; move some sections on riparian areas and floodplains from the wetlands chapter to the stream chapter; combine the 2 sections in chapter 5 on riparian/floodplain wetlands and unidirectional wetlands to a single chapter on wetlands and open waters.
- The panel recommended a more complete articulation of the process for selecting literature reviewed in the report, and for the process used to determining which studies were peer reviewed.